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REMARKS

This paper is responsive to the Non-Final Office Action dated May 23, 2005. Claims 1-28 were examined. Claims 1-28 remain present in this application, all of which have been rejected.

In the present office action: claims 1-2, 4-11, 13-24 and 26-28 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,719,800 (hereinafter "Mittal") in view of U.S. Patent No. 5,954,820 (hereinafter "Hetzler"); and claims 3, 12 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mittal and Hetzler, and in further view of U.S. Patent No. 6,076,171 (hereinafter "Kawata"). Applicants have amended the term "predetermined performance state" to "higher predetermined performance state" or "target performance state" to "higher target performance state" in independent claims 1, 10, 19 and 23. Support for these amendments may be found at, for example, page 5, lines 11-19, of Applicants' specification.

At the outset, Applicants note that Mittal is directed to switching an integrated circuit (IC) to a reduced power mode or state (i.e., a lower performance state) when an activity level of the IC rises above a threshold level. This, in fact, teaches away from Applicants' claimed subject matter, which now claims entering a higher (predetermined or target) performance state when utilization of an integrated circuit exceeds a threshold utilization value. Applicants further note that Hetzler is directed toward managing power consumed by a component, i.e., a CD-ROM drive or an LCD display, of a computer system that includes a single performance state. With reference to Hetzler, col. 6, lines 32-55, two common power-save modes are referred to as IDLE2 and STANDBY. In the IDLE2 mode, actuator 63 is parked and servo control electronics 53 and read electronics, including pre-amplifier and channel 54, are turned off to reduce power usage. In the STANDBY mode, the actuator 63 is moved to its parking location and spindle motor 62 and spindle drive 51 are turned off. The STANDBY mode purportedly has all of the power savings of the IDLE2 mode, plus the additional reduction in power to spindle control electronics portion of controller 56 and spindle drive 51. It is also noted the IDLE power mode is the normal track-following operation when data is not being read and no seek is occurring. While Hetzler uses the term "active state" to refer to the drive when it is in either the

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SEEK/READ or the IDLE modes, the Hetzler drive can only read data when it is in the SEEK/READ mode.

With reference to Hetzler Fig. 8, a plot for illustrating a time sequence for entry and exit of power-save modes for a CD-ROM drive is depicted. With reference to Table 2, at col. 7, and Fig. 8, the CD-ROM drive is in a SEEK/READ mode (P0 state) during access to the drive, in an IDLE mode (P1 state) when a CD-ROM drive is active, but is not being accessed, and in a power-save (IDLE2 OR STANDBY) mode (P2 state) otherwise. Applicants specifically note that the P1 and P2 states are non-performance states and that the SEEK/READ mode (P0 state) is the only state in which the CD-ROM drive is actually in a performance state, i.e., providing data. In sum, while Hetzler discloses multiple power modes, only one of those modes is a performance state, i.e., the P0 state. The remaining power modes, i.e., the P1 and P2 states, are non-performance states in which the drive is not providing data. While Hetzler discloses multiple power modes, Hetzler does not teach or suggest multiple performance states or skipping performance states. To reiterate, the Hetzler P2 and P1 states are, in fact, non-performance states.


In contrast to Mittal and Hetzler, Applicants' claimed subject matter, as is set-forth in independent claims 1, 10, 19 and 23 (as amended), is directed to entering a higher (predetermined or target) performance state as a next performance state, when utilization of an integrated circuit (IC) is above a threshold utilization value. As is disclosed in Applicants' specification, e.g., at page 7, lines 12-25, in one embodiment, irrespective of a current performance state, a highest performance state is selected to reduce the degradation of performance that may be perceived by a user of a computer system. For at least the reasons set forth above, Applicants submit that the combination of Mittal and Hetzler does not teach or suggest Applicants' claimed subject matter.

With respect to dependent claims 3, 12 and 25, Applicants submit that neither Mittal, Hetzler or Kawata, alone or in combination, teach or suggest the subject matter of Applicants' respective independent claims (as is discussed above) or a predetermined performance state that is a near maximum performance state. Additionally, Applicants submit that claims 2-9, 11-18,


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20-22 and 24-28 depend upon allowable claims and as such, for at least this reason, are also allowable.

In summary, claims 1-28 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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